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Public Junior High School Students' Perceptions of Authentic Assessment and Mastery of Cognitive Skills in Learning Social Studies

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Abstract

Aim: The purpose of this study was to examine the correlation between the perceptions of public junior high school students regarding the significance of authentic assessment in the process of learning social studies and their proficiency in cognitive skills. The study sought to assess the extent to which participants perceived authentic assessment as relevant in the context of learning social studies. Furthermore, it aimed to evaluate their appraisal of their cognitive skills mastery in areas such as perception, attention, memory, and logical reasoning.

Methodology: This study employed a descriptive-correlational research design to examine the correlation between public junior high school students' perceptions of the significance of authentic assessment in learning social studies and their proficiency in cognitive skills, specifically in areas such as perception, attention, memory, and logical reasoning. The design, as explained by Creswell (2012), is suitable for exploring the relationship between variables and involves statistical correlation testing to measure the level of association between them. The use of this research design allows for quantitative analysis of data, providing insights into the potential impact of authentic assessment on students' cognitive development.

Results: The study revealed a strong positive correlation between participants' perceptions of authentic assessment's relevance in the context of learning social studies and their appraisal of cognitive skills mastery. The findings indicated that students who perceived authentic assessment as highly relevant also reported higher levels of proficiency in areas such as perception, attention, memory, and logical reasoning.

Conclusion: The perceived significance of authentic assessment in learning social studies is associated with enhanced cognitive skills development. Fostering a positive perception of authentic assessment in students can potentially contribute to the improvement of their cognitive abilities, thereby enhancing their overall academic performance in social studies.

Keywords: authentic assessment, perceptions, junior high school students, cognitive skills, social studies

INTRODUCTION

Assessment plays a central role in the field of education, shaping both teaching and learning experiences. As Sadler (2005) emphasizes, assessment involves evaluating students' overall performance and making assumptions about their learning. Assessment plays a major role in determining the status of educational achievements which in turn leads to improved educational landscape (Amihan & Sanchez, 2023; Salendab & Akmad, 2023; Sanchez, 2023a). The information gathered through assessment is crucial for informed decision-making regarding students' abilities, appropriate placement, and overall achievement. Furthermore, assessment procedures are instrumental in evaluating the effectiveness of curriculum, teaching methodologies, and instructional materials. The significance of assessment extends beyond the classroom, as it contributes to the global pursuit of quality education, as outlined by the Sustainable Development Goal (SDG) on quality education.

In the context of outcomes-based education, students' achievement encompasses not only their proficiency and fluency but also their ability to apply learned concepts to solve real-life problems. This highlights the importance



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of authentic assessment, which captures the concrete learning competencies of students and fosters their development as lifelong learners (Carvajal & Sanchez, 2023; Muñoz & Sanchez, 2023; Salendab & Dapitan, 2021; Salendab, 2023). Authentic assessment requires a comprehensive approach that incorporates both traditional assessment methods and innovative approaches.

While traditional assessment forms such as multiple-choice tests, fill-in-the-blanks, and true-false questions have their merits, they often fall short in measuring students' ability to apply knowledge and skills in real-world scenarios (Salendab & Cogo, 2022; Sanchez, 2020a). Authentic assessment, on the other hand, tasks students with completing meaningful, real-world assignments that demonstrate their practical application of essential knowledge and skills. It serves as a valuable tool for determining whether students can transfer their learning to real-life situations (Bañez, 2016).

In social studies education, the acquisition of factual knowledge and its application at personal, societal, and global levels is essential for students to become competent and productive citizens. As such, educators in this discipline are encouraged to employ both traditional and authentic assessment forms to holistically analyze students' achievements. This comprehensive assessment approach serves as a bridge between teaching and learning, ensuring that students acquire the necessary competencies in social studies.

Given the pivotal role of assessment in educational contexts, it is imperative to examine the impact of authentic assessments on students' mastery levels in subjects like social studies. By understanding how authentic assessments influence the acquisition of critical learning competencies, educators can assess the effectiveness of the implemented curriculum and the designed learning experiences (Dizon & Sanchez, 2020; Salendab & Laguda, 2023; Sanchez, 2023b; Sanchez, et al., 2022). This knowledge allows for informed decision-making regarding curriculum implementation and revision, as well as the design of effective instructional initiatives.

Despite the undeniable importance of assessment in pedagogy, there remains a gap in a comprehensive exploration of assessment principles. Rather than being rooted in well-established testing theories, assessment practices often emerge from teachers' experiential knowledge. Bridging this gap requires an in-depth understanding of assessment and its various dimensions. This research sought to address this gap by examining the role of authentic assessments as a tool for promoting critical thinking. Specifically, it investigated the influence of authentic assessment on students' mastery of cognitive skills and the development of their social skills within the context of social studies education. By shedding light on the impact of authentic assessments, this study aimed to contribute to the advancement of assessment practices and their alignment with educational goals.

While traditional assessment forms such as multiple-choice tests, fill-in-the-blanks, and true-false questions have their merits, their limitations in measuring the real-world application of knowledge and skills are evident in the Philippine basic education system. According to a study by Adalar et al. (2022), these traditional assessments often focus on rote memorization and regurgitation of information, rather than fostering critical thinking and problem-solving abilities. This narrow approach to assessment fails to capture the holistic development of students' competencies in subjects like social studies.

On the other hand, authentic assessment methods have shown promise in the Philippine context. For instance, project-based assessments have gained recognition for their ability to engage students actively and provide opportunities for the practical application of knowledge. The study conducted by Al-Hassawi et al. (2020) highlights the effectiveness of project-based assessments in enhancing students' critical thinking skills and promoting a deeper understanding of social studies concepts. Through hands-on projects, such as creating community maps or conducting research on local governance, students are able to demonstrate their understanding and apply their knowledge to real-world situations.

Another example of authentic assessment in Philippine basic education is performance-based assessments. These assessments evaluate students' abilities to perform specific tasks or skills related to social studies. In a study by Tumlos-Castillo et al. (2021), performance-based assessments, such as debates, simulations, and role-plays, were found to foster active participation and collaboration among students. These assessments not only measure students' subject knowledge but also their communication, problem-solving, and critical thinking skills, which are crucial for their development as responsible citizens.

By incorporating authentic assessment practices, the Philippine basic education system can address the gap between traditional assessments and the desired outcomes of quality education (Salendab & Dapitan, 2021b; Salendab, 2021; Sanchez, 2020b; Sanchez & Sarmiento, 2020). These assessment methods provide a more comprehensive and meaningful approach to evaluating students' competencies in social studies and other subjects. They encourage students to apply their knowledge to real-life situations, fostering a deeper understanding of the subject matter and promoting critical thinking skills necessary for active citizenship.



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Objectives

The study examined the correlation between the perceptions of public junior high school students regarding the significance of authentic assessment in the process of learning social studies and their proficiency in cognitive skills. Specifically, the study aimed to achieve the following objectives:

1. Assess the extent to which Grade 8 students perceive the relevance of authentic assessment in learning Social Studies.
2. Measure the mastery level of cognitive skills in Social Studies among Grade 8 students, specifically in perception, attention, memory, and logical reasoning.
3. Determine if a significant relationship exists between students' perception of the relevance of authentic assessment in learning Social Studies and their assessment of the mastery of their cognitive skills.

METHODS

Research Design

This study employed a descriptive-correlational research design to investigate the relationship between the perception of authentic assessment in learning social studies among junior high school students, and their mastery of cognitive skills. According to Fraenkel and Wallen (2008), descriptive research aims to examine the current state of a phenomenon, which could be an object, a place, a group of people, or an institution. Conversely, correlational research is a quantitative method used to establish relationships between two or more variables. As stated by Creswell (2012), this research design examines the connection between multiple variables to determine if they influence one another. In this design, statistical correlation tests are utilized to describe and quantify the degree of association between the variables. Data collection is conducted to test the hypothesis and obtain answers to questions regarding the current status of the subjects. The design provides a comprehensive understanding of the situation and explores the factors contributing to specific phenomena.

Given the aforementioned descriptive nature of the research, quantitative data can be gathered to survey the students' perception of the significance of authentic assessment in learning social studies. This data can then be paired with their mastery of cognitive skills and the development of their social skills through appropriate correlational techniques. The statistical analysis will elucidate how students' perception of the relevance of authentic assessment in learning social studies impacts their mastery of cognitive skills. This research design is well-suited for the study's objectives, which include assessing the participants' perceptions of the relevance of authentic assessment in learning social studies and evaluating their mastery of cognitive skills.

Population and Sampling

This study was conducted during the 2022-2023 academic year at Tanauan Integrated High School and focused on Grade 8 students who were taking *Araling Panlipunan* as part of their basic education curriculum. The participants were selected based on their successful acquisition of the essential learning competencies in Grade 8 Social Studies, which was determined through carefully designed learning activities and authentic types of assessment. The study utilized an incidental sample of 175 students, comprising all students from the five sections of Grade 8 at Tanauan City Integrated High School. These students served as respondents for the research. Each section consisted of 35 individuals, resulting in a total incidental sample of 175 students.

Instrument

A researcher-developed questionnaire was utilized to collect the necessary data for the study. The questionnaire was specifically designed to evaluate the significance of authentic assessment in social studies learning and the mastery of cognitive skills in the field.

The questionnaire was divided into three parts, each comprising a set of items that respondents could respond to by checking the corresponding box. The initial part of the questionnaire aimed to assess the relevance of authentic assessment in social studies learning. It encompassed five indicators: short investigation, open-response questions, self-assessment, visual representation, and policy-making. Respondents were requested to indicate the extent to which they deemed authentic assessment relevant to social studies learning on a scale of 1 to 5. A score of



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1 denoted "to a very small extent," while a score of 5 denoted "to a very large extent." These indicators were deliberately chosen to encompass different facets of authentic assessment pertinent to social studies education.

The second part of the questionnaire focused on evaluating the mastery of cognitive skills in social studies. It consisted of subcategories such as perception, attention, memory, and logical reasoning. Within each subcategory, five items were included. Respondents were asked to indicate the extent to which they had mastered each item by selecting a score ranging from 1 to 5. A score of 1 represented "least mastered," while a score of 5 represented "extremely mastered." These items were devised to cover a range of cognitive skills essential for success in social studies.

Throughout the construction of the researcher-developed questionnaire, the researcher ensured that the items were clear, concise, and aligned with the study's objectives. The construction of the items drew upon existing literature and expertise in the field of social studies education. The researcher also sought validation from experts, including an Education Program Supervisor, Master Teachers, and a panel of examiners, to enhance the questionnaire's content validity.

Following the validation, a pilot testing phase was conducted with a group of 30 grade 8 students who were not part of the study. This step aided in identifying any potential issues or areas for improvement in the questionnaire. The reliability of the questionnaire was assessed using internal consistency analysis, specifically Cronbach's alpha coefficient. This statistical measure determines the extent to which the items within a scale or construct are interrelated.

The calculated Cronbach's alpha coefficients ranged from 0.77 to 0.90 for each indicator of the variables covered. These values exceeded the minimum acceptable level of 0.70, indicating that the questionnaire exhibited satisfactory reliability. This finding suggested that the items within each part of the questionnaire were internally consistent in measuring their respective constructs.

After confirming the reliability of the questionnaire through pilot testing and internal consistency analysis, the final version was administered to the target respondents. This comprehensive construction process ensures that the questionnaire is well-designed, valid, and reliable, enabling the researcher to collect accurate and meaningful data to effectively address the research objectives.

Data Collection

In the study, the researcher obtained approval from the Principal of Tanauan City Integrated High School to conduct a survey among Grade 8 students. After receiving approval, the researcher ensured that authentic assessments were implemented in Grade 8.

During the first quarter, authentic assessments were carried out in the Grade 8 Social Studies classes as part of the World Geography discussions. Students were assigned a short investigation to explore a specific topic within World Geography, focusing on the impact of climate change in a particular region or country. They presented their findings through a presentation and a multimedia project. Open-response questions were used to assess students' comprehension of critical concepts, such as the significance of natural resources or the effects of globalization. To gauge their understanding, students were asked to reflect on their learning and complete a self-assessment rubric, in addition to writing a brief essay on their key takeaways from a particular lesson or topic. Additionally, students demonstrated their understanding through visual representations, creating maps that highlighted important landmarks, natural resources, and population centers, as well as infographics that showcased key facts and figures related to a specific topic. Moreover, students were encouraged to engage in policy-making by researching a World Geography-related issue, such as immigration policies or trade agreements, and proposing a policy to address the problem. This activity aimed to help students apply their knowledge to real-world scenarios, fostering critical thinking and problem-solving skills.

In order to ensure that the authentic assessments ran smoothly during the first quarter, the researcher collaborated with the advisers and respective teachers to minimize disruptions to the regular class schedule. The survey conducted by the researcher aimed to gather feedback from the participants regarding the significance of authentic assessments in learning social studies, particularly in terms of enhancing their cognitive skills and developing their social skills. The data collected from the respondents were quantitatively analyzed and interpreted with the assistance of a statistician.

Prior to conducting the survey, a formal consent letter was sent to the parents or legal guardians of the students, seeking their voluntary participation in the study. The parents or legal guardians were also informed that their child could withdraw from the study at any time without facing any penalties. The consent forms provided to them clearly outlined the research objectives, data collection methods, and activities involved, which were also



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explained to all the respondents. Measures were put in place to ensure the safety and privacy of the participants, and the researcher was committed to respecting their rights and addressing any concerns they may have had.

Data Analysis

The following statistical tools were used in treating the gathered data, which served as bases in the analysis and interpretation of data.

Before conducting any statistical analysis, a normality test was performed to assess whether the data followed a normal distribution. For parametric tests, such as the Mean and Pearson Product Moment Correlation, normality assumptions need to be met. For nonparametric tests, other distributional assumptions are considered. This step was crucial in establishing the accuracy of the statistical results.

The Mean was used to determine the respondents' perception of the relevance of authentic assessment in learning social studies and their assessment of the mastery of their cognitive skills. This measure provides the average value of the respondents' perceptions and assessments.

The Standard Deviation was utilized to determine the extent to which the respondents' responses describing their perception of the relevance of authentic assessment in learning social studies and their assessment of the mastery of their cognitive skills deviate from their mean scores. This measure quantifies the variability or spread of the data points around the mean.

The Pearson Product Moment Correlation was employed to determine if a significant relationship exists between the respondents' perception of the relevance of authentic assessment in learning social studies to their assessment of the mastery of their cognitive skills. This statistical measure quantifies the strength and direction of the linear relationship between two continuous variables.

RESULTS and DISCUSSION

Relevance of Authentic Assessment in Learning Social Studies

To give an in-depth analysis and interpretation, the gathered data are arranged thematically and sequentially, resembling the presentation of the specific objectives posed at the beginning of the study.

Table 1. Relevance of Authentic Assessment in Learning Social Studies

Variables	Mean	SD	Interpretation
Short investigation	3.86	0.31	To a large extent
Open-Response Questions	3.83	0.57	To a large extent
Self-Assessment	3.80	0.60	To a large extent
Visual Representation	3.82	0.42	To a large extent
Policy Making	4.09	0.42	To a large extent
Overall	3.88	0.46	To a large extent

Legend: 4.21-5.00- To a very large extent, 3.41-4.20- To a large extent, 2.61-3.40- To a moderate extent, 1.81-2.60- To a small extent, 1.00-1.80- To a very small extent

Table 1 presents the results of the authentic assessment based on multiple indicators, displaying the mean, standard deviation, and interpretation for each indicator. The variables assessed were short investigations, open-response questions, self-assessment, visual representation, and policy-making. The means for all indicators were relatively high, ranging from 3.80 to 4.09, indicating that the students performed well overall on the assessment. The highest mean score was achieved in the policy-making indicator ($\bar{X} = 4.09$), while the lowest mean score was observed in the self-assessment indicator ($\bar{X} = 3.80$).

The consistently high mean scores across all indicators suggest that students were able to effectively apply their knowledge and skills to real-world situations. The low standard deviations for certain variables, such as short investigation, indicate that the assessment consistently measured the intended learning outcomes. However, the variability in scores for the self-assessment indicator can be attributed to the nature of the self-assessment process.



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Self-assessment is a complex undertaking that requires students to reflect on their learning, evaluate their abilities and limitations, and establish goals for future learning. This process can pose challenges for some students, potentially explaining the higher degree of variability in the scores for this particular indicator (Panadero, 2017).

The result suggests that the authentic assessment used in this study effectively measured students' ability to apply their knowledge and skills in practical settings. This supports the value of authentic assessment as a reliable measure of students' real-world competence (Salendab & Dapitan, 2020; Sanchez, 2022). Furthermore, the consistently high mean scores across all indicators indicate that the instructional methods and curriculum employed in the study were successful in promoting students' learning and achievement. For instance, a study by Archer et al. (2021) found similar results, indicating that authentic assessments can effectively measure students' ability to transfer their knowledge to real-world contexts. Moreover, a meta-analysis conducted by Greiff et al. (2015) demonstrated a positive relationship between self-assessment and academic achievement, supporting the notion that self-assessment plays a crucial role in enhancing students' learning outcomes.

Respondents' Assessment of the Mastery of Their Cognitive Skills in Social Studies

To determine the respondents' assessment of the mastery of their cognitive skills in social studies, a survey questionnaire in the form of a self-assessment measuring their mastery of the cognitive skills along with perception, attention, memory, and logical reasoning was administered among them. The results of the survey questionnaire administered are presented in the succeeding tables.

Table 2 presents data on the respondents' self-evaluation of their cognitive skill mastery in social studies as compared to their perception. The table provides information on the respondents' own understanding of their abilities and how they perceive their skill levels in social studies.

Table 2. Mastery Level of Cognitive Skills in Social Studies Relative to Perception

<i>As a grade 8 student studying Social Studies, I can easily...</i>	Mean	SD	Interpretation
1. pickup information from mass media	4.13	0.45	Highly Mastered
2. interpret events from a sociological perspective	3.71	0.45	Highly Mastered
3. make conclusions from different forms of data	3.95	0.24	Highly Mastered
4. attach meaning to prevailing socio-historical events	3.87	0.71	Highly Mastered
5. formulate a response to a prevailing social condition	4.06	0.54	Highly Mastered
Overall	3.95	0.32	Highly Mastered

Legend: 4.21-5.00-Extremely Mastered, 3.41-4.20-Highly Mastered, 2.61-3.40-Moderately Mastered, 1.81-2.60-Slightly Mastered, 1.00-1.80-Least Mastered

According to the table, the respondents demonstrated a high level of mastery in social studies cognitive skills related to perception. All of the indicators for the items fell under the category of "highly mastered," with an overall mean of 3.95, indicating a high level of mastery. This result can be attributed to the understanding that perceptual skills are crucial for students to comprehend the phenomena that surround them, particularly in the context of social studies.

The ability to grasp numerous phenomena relevant to social studies involves several key aspects. Firstly, students must be able to gather information effectively ($\bar{X} = 4.13$), interpreting the data they encounter ($\bar{X} = 3.71$), and attaching meaning to it ($\bar{X} = 3.87$). Furthermore, they should be able to draw conclusions ($\bar{X} = 3.95$) that enable them to formulate responses to prevailing social conditions ($\bar{X} = 4.06$). Álvarez-Martínez-Iglesias et al. (2021) describe these skills as essential, as they utilize sensory and cognitive processes that enable students to understand and appreciate the world around them. This understanding of phenomena through the interpretation of sensory information occurs when students possess sensory awareness, draw upon personal experiences, and engage in comprehension that ultimately leads to a response.

By emphasizing the development of perceptual skills, educators can enhance students' ability to comprehend and engage with the complex social phenomena they encounter. Moreover, this study's results align



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with recent research conducted by Saphier (1973), which demonstrated the positive impact of perceptual skills on students' academic performance in social studies. The study found that students who demonstrated higher levels of mastery in perceptual skills achieved significantly better grades in social studies exams compared to their peers who exhibited lower levels of mastery.

Table 3. Mastery Level of Cognitive Skills in Social Studies relative to attention

<i>As a grade 8 student studying Social Studies, I can easily...</i>	Mean	SD	Interpretation
1. filter relevant information from varied media sources	4.10	0.52	Highly Mastered
2. draw only necessary information from news reports	4.46	0.51	Extremely Mastered
3. distinguish factual information from opinions	4.41	0.51	Extremely Mastered
4. stay focused for some time on relevant social issues	4.45	0.58	Extremely Mastered
5. perform academic tasks simultaneously	4.09	0.80	Highly Mastered
Overall	4.30	0.43	Extremely Mastered

Legend: 4.21-5.00-Extremely Mastered, 3.41-4.20-Highly Mastered, 2.61-3.40-Moderately Mastered, 1.81-2.60-Slightly Mastered, 1.00-1.80-Least Mastered

Table 3 illustrates the respondents' self-assessment of their proficiency in cognitive skills related to Social Studies, specifically in the aspect of attention. According to the table, the respondents demonstrated mastery in the cognitive skills required for Social Studies, which heavily rely on attention. This mastery is crucial for acquiring meaningful information that is essential in the field of Social Studies. Given that this discipline necessitates students to be mindful and attentive to facts and evidence pertaining to various areas of Social Studies, their cognitive abilities in relation to attention are refined. Consequently, they are capable of effectively filtering ($\bar{X} = 4.10$), differentiating ($\bar{X} = 4.41$), and extracting relevant information ($\bar{X} = 4.46$) while simultaneously engaging in academic tasks ($\bar{X} = 4.09$) and maintaining focus on pertinent social issues ($\bar{X} = 4.45$).

Mackie et al. (2013) emphasized the dependence of meaningful information acquisition on attention. In a similar vein, the performance of attention has an impact on the rate of learning and, consequently, the effectiveness of memory. Developing and enhancing attentional abilities can lead to improved mastery of cognitive skills in Social Studies. Students who can effectively allocate their attention and filter out irrelevant information are better equipped to comprehend and retain important concepts and knowledge within this discipline (Sanchez, Sanchez & Sanchez, 2023). By providing students with opportunities to practice and develop their attentional abilities, educators can enhance their cognitive performance and facilitate more effective learning in Social Studies (Gamino et al., 2010).

Table 4. Mastery Level of Cognitive Skills in Social Studies relative to memory

<i>As a grade 8 student studying Social Studies, I can easily</i>	Mean	SD	Interpretation
1. recall similar experiences on prevailing social issue	4.06	0.56	Highly Mastered
2. retain important historical information	3.95	0.66	Highly Mastered
3. become conscious of the current events affecting the society	3.93	0.86	Highly Mastered
4. manipulate information related to history and society mentally	3.97	0.64	Highly Mastered
5. recall historical events in a chronological and specific order	3.94	0.66	Highly Mastered
Overall	3.97	0.52	Highly Mastered

Legend: 4.21-5.00-Extremely Mastered, 3.41-4.20-Highly Mastered, 2.61-3.40-Moderately Mastered, 1.81-2.60-Slightly Mastered, 1.00-1.80-Least Mastered



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Table 4 displays the self-assessment of respondents regarding their mastery of cognitive skills in Social Studies, particularly in relation to memory. The data from the table indicates that the respondents demonstrated a high level of mastery in the cognitive skills of Social Studies that require the use of memory. This mastery enables them to effectively monitor their own learning process. Such monitoring plays a crucial role in facilitating the retention ($\bar{X} = 3.95$), recall ($\bar{X} = 3.94$), and manipulation of historical information ($\bar{X} = 3.97$), while keeping them cognizant of current events ($\bar{X} = 3.93$) and other experiences that impact society ($\bar{X} = 4.06$). These skills are vital for the development of higher-order thinking abilities.

Supporting this observation, Adalar et al. (2022) found that memory serves as a powerful tool in promoting student-centered learning within the field of Social Studies. They highlight its significant contribution in encouraging all students to monitor their own learning progress, thus raising their awareness of the information they are capable of remembering. This heightened awareness plays a critical role in the acquisition of advanced thinking and creative skills. Studies by Gamino et al. (2010) and Greiff et al. (2015) corroborate the notion that memory plays a crucial role in the acquisition and application of higher-order thinking skills. Gamino et al. (2010) conducted a study that examined the long-term effects of memory training on students' cognitive abilities. The results demonstrated a significant positive relationship between memory training and the development of higher-level thinking skills in various academic domains, including Social Studies.

Table 5. Mastery Level of Cognitive Skills in Social Studies relative to Logical reasoning

<i>As a grade 8 student studying Social Studies, I can easily...</i>	Mean	SD	Interpretation
1. perform a scientific and empirical investigation	3.95	0.67	Highly Mastered
2. rationalize decisions and conclusions based on a given problem	4.06	0.85	Highly Mastered
3. present the broad reality or big picture of an argument	4.10	0.72	Highly Mastered
4. draw broad conclusions from specific observations	4.05	0.56	Highly Mastered
5. illustrate a tangible pattern out of data to support a hypothesis	3.73	0.57	Highly Mastered
Overall	3.98	0.52	Highly Mastered

Legend: 4.21-5.00-Extremely Mastered, 3.41-4.20-Highly Mastered, 2.61-3.40-Moderately Mastered, 1.81-2.60-Slightly Mastered, 1.00-1.80-Least Mastered

Table 5 displays the self-assessed mastery of cognitive skills in Social Studies, specifically focusing on logical reasoning, by the respondents. The table reveals that the respondents demonstrated a high level of mastery in Social Studies cognitive skills that necessitate logical reasoning. The overall mean score for this mastery is 3.98, indicating a high level of proficiency. This considerable mastery of logical reasoning skills enables students to effectively justify decisions and draw conclusions ($\bar{X}=4.06$) by engaging in scientific and empirical investigations ($\bar{X}=3.95$), which further enhance their ability to present a comprehensive understanding of reality ($\bar{X}=4.10$), draw general conclusions ($\bar{X}=4.05$), and identify discernible patterns within data to support a hypothesis ($\bar{X}=3.73$). These reasoning-based activities play a crucial role in facilitating knowledge acquisition and the development of logical competence among learners, as they engage in experiential and logical processes. Empirical evidence suggests that this analytical competence, as highlighted by Nunes et al. (2010), acts as a causal factor in learning and significantly contributes to academic performance. For instance, Gómez-Veiga et al. (2018) conducted a study examining the impact of logical reasoning skills on academic achievement. Their results corroborate the current study's findings, demonstrating a positive relationship between logical reasoning abilities and academic performance. Furthermore, in a study by Shi and Qu (2022), they found that students who exhibited strong logical reasoning skills were more likely to excel in their social studies coursework.



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Relationship between the Students' Perception of the Relevance of Authentic Assessment in Learning Social Studies and their Assessment of the Mastery of their Cognitive Skills

The two variables were correlated using the appropriate statistical measure to determine if there is a significant relationship between the student's perception of the relevance of authentic assessment in learning Social Studies and the mastery of their cognitive skills. The results are presented in Table 6.

The table presents an illustration of the correlation between respondents' perception of the relevance of authentic assessment in learning Social Studies and their assessment of the mastery of their cognitive skills. The table clearly demonstrates a significant relationship between the two variables.

Table 6. Relationship between the Perceived Relevance of Authentic Assessment and Mastery Level of Cognitive Skills in Learning Social Studies

Authentic Assessment	Mastery Level of Cognitive Skills			
	Perception	Attention	Memory	Logical Reasoning
Short investigation	.564**	.396**	.528**	.616**
Open-Response Questions	.800**	.731**	.662**	.804**
Self-Assessment	.530**	.650**	.444**	.472**
Visual Representation	.853**	.771**	.841**	.682**
Decision Making	.780**	.754**	.585**	.817**

** Correlation is significant at the 0.01 level (2-tailed).

* Correlation is significant at the 0.05 level (2-tailed).

Upon examining the combination of the short investigation method with mastery of cognitive skills, the strongest correlation is observed between the process and logical reasoning. Following closely behind are perception and memory. On the other hand, the weakest correlation is observed between the short investigation method and attention. All correlations presented in the table have a significance level of 0.01, indicating that the observed associations are highly unlikely to have occurred by chance. As a result, the data suggest that the short investigation method of authentic assessment may serve as an effective tool for assessing and improving cognitive skills, especially in the areas of logical reasoning, perception, and memory. This finding aligns with the results of a study conducted by Rosário et al. (2020), which also highlighted the effectiveness of the short investigation method in enhancing cognitive skills through problem-solving, critical thinking, and decision-making.

Based on the obtained results, it is evident that utilizing open-response questions as an authentic assessment is significantly correlated with the mastery of cognitive skills in four key areas: perception, attention, memory, and logical reasoning. Each cognitive skill exhibits a positive correlation coefficient, with perception having an r-value of .800, attention an r-value of .731, memory an r-value of .662, and logical reasoning an r-value of .804. These positive correlations suggest that the implementation of open-response questions in authentic assessment effectively promotes and measures the mastery of cognitive skills in the aforementioned areas. This positive correlation can be attributed to the theory of constructivism, which emphasizes learners' active construction of knowledge by integrating new information with existing knowledge and experiences. Recent research conducted by Mohanan and Selvan (2021) explored the relationship between open-ended assessment and cognitive skills among medical students, with findings indicating that open-ended assessment significantly enhanced students' cognitive skills, particularly in critical thinking and problem-solving. The authors of the study propose that open-ended assessment tasks stimulate the active construction of knowledge and facilitate the development of cognitive skills necessary for solving complex problems in real-life scenarios.

Furthermore, the table also displays the correlations between self-assessment and mastery of cognitive skills, specifically in perception, attention, memory, and logical reasoning. The results reveal a positive relationship between self-assessment and the mastery of these skills, with correlation coefficients ranging from .444 to .650. All of these coefficients are statistically significant at the .01 level, indicating that individuals who possess a better ability



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to self-assess their competencies in these areas are more likely to have a higher level of mastery in the corresponding cognitive skills. This finding demonstrates that learners who can accurately assess their knowledge and abilities are more inclined to engage in effective learning strategies, ultimately leading to higher levels of mastery (Zimmerman, 2013; Sanchez, 2020b).

Moreover, a strong positive correlation is identified between visual representation and the mastery of cognitive skills in perception, attention, memory, and logical reasoning. This implies that visual representation may serve as a more effective means of measuring the mastery of cognitive skills, as it assesses students' ability to apply their knowledge and skills through graphical representations rather than merely recalling information during a test. This finding aligns with the research conducted by Savic and Vujicic (2021) and Sanchez (2020c), which suggests that visual representation contributes to deeper learning and better retention of information. This can be attributed to the fact that visual representation requires students to employ higher-order thinking skills, leading to more meaningful learning experiences.

When examining the correlation between decision-making and mastery of cognitive skills, the data presented in the table indicates a strong positive correlation. Higher levels of mastery in cognitive skills are associated with improved decision-making abilities. This finding is supported by Frey and Pedroni (2020), who argue that cognitive skills, such as attention and logical reasoning, play a crucial role in successful decision-making. According to their perspective, cognitive abilities are essential for accurate prediction, option evaluation, and selection of the optimal course of action. Thus, this correlation supports the notion that enhancing cognitive skills can lead to improved decision-making.

In general, the computed correlation coefficients (r-values) reveal a significant positive correlation at the 0.01 alpha level. This suggests a meaningful relationship between the variables under investigation. As a result, the researcher rejected the null hypothesis. This significant relationship between the respondents' perception of the relevance of authentic assessment in learning social studies and the mastery of their cognitive skills implies that authentic assessment promotes self-regulation and autonomy, making students more mindful of their learning. This finding is consistent with Vu and Dall'Alba's (2014) emphasis on the role of authentic assessment in automating and empowering students, as it engages them in meaningful processes and evaluations, ultimately leading to improved performance across various subjects.

CONCLUSION

The study produced several notable findings. The respondents perceived short investigations, open-response questions, self-assessment, visual representation, and policy-making as authentic assessments that were highly relevant to learning Social Studies. The respondents demonstrated a high level of mastery in cognitive skills related to Social Studies, including perception, memory, and logical reasoning. They also displayed an exceptional level of mastery in cognitive skills requiring attention. Furthermore, a significant relationship was observed between students' perception of the relevance of authentic assessment in learning Social Studies and their assessment of their cognitive skills. As a result, the null hypothesis proposed in the study was rejected.

RECOMMENDATIONS

Based on the study's results and conclusions, the following recommendations are proposed. To maintain students' positive perception of the relevance of authentic assessments in learning Social Studies, teachers can design real-life and real-world learning experiences and activities that allow students to apply their cognitive skills. Additionally, since students have demonstrated highly developed social skills, the Social Studies subject coordinator may collaborate with the Social Studies teachers to create co-curricular and extra-curricular activities that require student participation and allow them to showcase and capitalize on their social skills. Furthermore, given the positive correlation between authentic assessments and both cognitive skill mastery and social skill development, the school principal, along with the Social Studies coordinator and teachers, may lead a teaching demonstration festival focused on sharing best practices in utilizing authentic assessments to sustain students' cognitive and social skills. Moreover, the Head of the Social Studies department could collaborate with various student organizations within the school to initiate activities and programs that provide opportunities for students to enhance their cognitive and social skills, such as producing documentaries on relevant social issues and engaging in similar activities. Finally, conducting additional studies to further explore the impact of authentic assessment on enhancing students' cognitive and social skills in Social Studies is recommended.



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